Appl. No. 10/534,422 Amendment dated November 20, 2007 Response to Office Action of August 23, 2007

Amendments to the Specification:

Please replace paragraph [0061] with the following amended paragraph:

[0061] The toilet system 1 further comprises a use detection mechanism <u>UD (not shown)</u> to detect use of the toilet 5 and to activate the gas removal device 9 in response to such detection.

Please replace paragraph [0062] with the following amended paragraph:

[0062] The use detection mechanism <u>UD</u> may take any suitable form and may, for instance, comprise a motion sensor operable to detect the presence of a person in the region immediately above the seat of the toilet 5. Alternatively, the use detection mechanism <u>UD</u> may comprise a pressure sensor, which may be located in a suitable location to detect the weight of a person using the toilet 5.

Please replace paragraph [0063] with the following amended paragraph:

[0063] As a further possibility, the use detection mechanism <u>UD</u> may comprise a switch which is mounted on a wall in the vicinity of the toilet system 1, or in another suitable location, so that a user of the toilet 5 can activate the gas removal device 9 manually. In preferred embodiments of the invention, a switch is provided which may be located beneath the seat of the toilet 5, thereby acting as a pressure sensor to detect use of the toilet 5 automatically, or may alternatively be mounted on a nearby wall and activated manually. It is envisaged that this will be found useful in situations where someone sitting on the toilet will not always necessitate use of the gas removal device 9, for instance in a household consisting mainly or entirely of women.

Please replace paragraph [0064] with the following amended paragraph:

[0064] It is preferred, particularly in conjunction with this embodiment, that the use detection mechanism \underline{UD} is provided with a wireless connection \underline{R} to the gas removal device 9. This is partially for convenience, and partially because users may often feel uneasy at the presence of electrical wires in a bathroom, as there may be a fear of receiving an electric shock.

Appl. No. 10/534,422 Amendment dated November 20, 2007 Response to Office Action of August 23, 2007

Please replace paragraph [0073] with the following amended paragraph:

[0073] In circumstance where a user of the toilet (e.g. a child) neglects to flush the toilet following use, the liquid detection mechanism 17 will not deactivate the gas removal device 9. Hence, in preferred embodiments of the invention, a timer mechanism <u>T</u> is provided to deactivate the gas removal device 9 after the elapsing of a predetermined period of time following activation thereof or after the elapsing of a predetermined period of time following the total to the toilet 5 has ceased.

Please replace paragraph [0076] with the following amended paragraph:

[0076] In preferred embodiments of the present invention, the connector 14 that connects the conduit 13 to the soil stack 8 comprises a one-way valve, valve V, which allows gas to pass from the conduit 13 into the soil stack 8 but which prevents the passage of gas from the soil stack 8 into the conduit 13. Advantageously, this one-way valve comprises a flexible diaphragm, diaphragm D, which blocks an aperture in the valve 14 when gas attempts to flow from the soil stack 8 to the conduit 13, but distorts to allow gas to flow from the conduit 13 to the soil stack 8.

Please replace paragraph [0077] with the following amended paragraph:

[0077] The gas removal device 9 may optionally be powered by a mains connection, or may be battery powered. In battery powered embodiments, two rechargeable batteries $\underline{\mathbf{B}}$ may be provided, one of which can be recharged while the other is in use.

Please add the following new paragraph after paragraph [0077]:

[0077.1] Figure 1 depicts an annular float 22, which may be provided within the inner aperture 11 of the gas removal device 9. The float 22 is configured so that if the water level in the toilet rises to the toilet rim (for instance, due to a blockage or malfunction), and water enters the inner aperture 11 from below, the float 22 will float on the surface of the rising water and rise into a position where it blocks the gas intake port of the gas removal device 9. Hence, in the event of the gas removal device 9 being flooded with water from below, the float 22 will prevent the water entering the gas intake port.

Appl. No. 10/534,422 Amendment dated November 20, 2007 Response to Office Action of August 23, 2007

Please replace paragraph [0078] with the following amended paragraph:

[0078] In advantageous embodiments of the invention, one or more turbines or other power generation elements <u>TG</u> are placed in the flow path of an inflow connection <u>WS</u> to the water tank 2 from a mains water supply. In these embodiments, the arrangement is such that the flow of water into the water tank 2 from the mains water supply causes the power generation elements to generate power, which is then supplied to the gas removal device 9 or to a battery B thereof.